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Docket No.: 1315-051

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Byoung Kee KIM

U.S. Patent Application No. 7,153,340

Date: December 26, 2006

ATTN: Certificate of Correction Branch

Group Art Unit: 1742

Allowed: December 26, 2006

Examiner: NGOCLAN THI MAI

For: PROCESS FOR MANUFACTURING NANO PHASE TAC-TRANSITION METAL  
BASED COMPLEX POWDERREQUEST FOR CERTIFICATE OF CORRECTIONCommissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

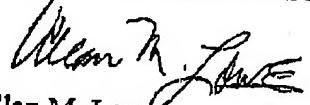
Sir:

It is respectfully requested that a Certificate of Correction be issued in order to correct errors specified in the attached PTO Form SB/44.

A credit card authorization form in the amount of \$100.00 is enclosed.

Respectfully submitted,

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CERTIFICATE OF CORRECTION**Page 1 of 1

PATENT NO. : 7,153,340

APPLICATION NO.: 10/747,655

ISSUE DATE : December 26, 2006

INVENTOR(S) : Byong Kee KIM; Seong Hyeon HONG; Yong Won WOO

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**Cover page, Item (75) Inventors:**

Please amend the Inventor as follows from "Byong Kee KIM" to  
--Byoung Kee KIM--.

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

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(12) United States Patent  
Kim et al.(10) Patent No.: US 7,153,340 B2  
(45) Date of Patent: \*Dec. 26, 2006

- (54) PROCESS FOR MANUFACTURING NANO-PHASE TaC-TRANSITION METAL BASED COMPLEX POWDER  
*Byoung Kee Kim*
- (75) Inventors: Byong-Kee Kim, Dongre-Ku (KR); Seong Hyeon Hong, Changwon-shi (KR); Yong Won Woo, Seongnam-shi (KR)
- (73) Assignee: Korean Institute of Machinery and Materials, Taejon (KR)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: 10/747,655

(22) Filed: Dec. 30, 2003

## (65) Prior Publication Data

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## (30) Foreign Application Priority Data

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## (51) Int. Cl.

C01B 31/30 (2006.01)  
C22C 29/06 (2006.01)

(52) U.S. Cl. 75/351; 75/369; 423/440

(58) Field of Classification Search 75/351; 75/369; 423/440

See application file for complete search history.

(56)

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(57)

## ABSTRACT

Ultra fine TaC-transition metal based complex powder is prepared by: dispersing a mixture of a Ta-containing material and a transition metal-containing water soluble salt into a solvent; stirring the mixture and spray-drying the stirred material to obtain precursor powder; calcining the precursor powder to form ultra fine Ta-transition metal complex oxide powder; mixing the ultra fine Ta-transition metal complex oxide powder with nano-sized carbon particles, followed by drying to obtain complex oxide powder; and subjecting the dried complex oxide powder to reduction/carburization in a non-oxidizing atmosphere.

12 Claims, 2 Drawing Sheets